

## SEQUENCE LISTING

<110> The Government of the United States of America, represented by the  
Secretary, Department of Health and Human Services

<120> T20/DP178 AND T21/DP107 ARE ACTIVATORS  
OF HUMAN PHAGOCYTE  
FORMYL PEPTIDE RECEPTORS

<130> NIH171.001C1

<150> PCT/US00/12371

<151> 2000-05-05

<150> 60/132,686

<151> 1999-05-05

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TEOTET "SCEOOT"

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Asn Trp Phe

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Trp Phe

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 Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
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           20            25

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 Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
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Lys Trp Ala Ser Leu Trp Asn Trp Phe

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Trp Ala Ser Leu Trp Asn Trp Phe

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Ala Ser Leu Trp Asn Trp Phe

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Ser Leu Trp Asn Trp Phe

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Asn Trp Phe

<210> 82  
<211> 18  
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<220>  
<223> Artificial Peptide

<400> 82  
Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn

1            5            10            15  
Trp Phe

<210> 83  
<211> 17  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 83  
Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp  
1            5            10            15  
Phe

<210> 84  
<211> 16  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 84  
Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1            5            10            15

<210> 85  
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<220>  
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<400> 85  
Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1            5            10            15

<210> 86  
<211> 14  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 86

Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 87  
<211> 13  
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<220>  
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<400> 87  
Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 88  
<211> 12  
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<220>  
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<400> 88  
Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 89  
<211> 11  
<212> PRT  
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<220>  
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<400> 89  
Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10

<210> 90  
<211> 10  
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<220>  
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<400> 90  
Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5 10



<210> 91  
<211> 9  
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<220>  
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<400> 91  
Lys Trp Ala Ser Leu Trp Asn Trp Phe  
1 5

<210> 92  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 92  
Trp Ala Ser Leu Trp Asn Trp Phe  
1 5

<210> 93  
<211> 7  
<212> PRT  
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<220>  
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<400> 93  
Ala Ser Leu Trp Asn Trp Phe  
1 5

<210> 94  
<211> 6  
<212> PRT  
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<220>  
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<400> 94  
Ser Leu Trp Asn Trp Phe  
1 5

<210> 95  
<211> 5

<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 95  
Leu Trp Asn Trp Phe  
1 5

<210> 96  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 96  
Trp Asn Trp Phe  
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<210> 97  
<211> 4  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 97  
Asn Asn Leu Leu  
1

<210> 98  
<211> 5  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 98  
Asn Asn Leu Leu Arg  
1 5

<210> 99  
<211> 6  
<212> PRT  
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<220>  
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<400> 99  
Asn Asn Leu Leu Arg Ala  
1 5

<210> 100  
<211> 7  
<212> PRT  
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<220>  
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<400> 100  
Asn Asn Leu Leu Arg Ala Ile  
1 5

<210> 101  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
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<400> 101  
Asn Asn Leu Leu Arg Ala Ile Glu  
1 5

<210> 102  
<211> 9  
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<400> 102  
Asn Asn Leu Leu Arg Ala Ile Glu Ala  
1 5

<210> 103  
<211> 10  
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<213> Artificial Sequence

<220>  
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<400> 103

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln  
1 5 10

<210> 104

<211> 11

<212> PRT

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<220>

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<400> 104

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln  
1 5 10

<210> 105

<211> 12

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<220>

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<400> 105

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His  
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<210> 106

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 106

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu  
1 5 10

<210> 107

<211> 14

<212> PRT

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<220>

<223> Artificial Peptide

<400> 107

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu  
1 5 10

<210> 108  
 <211> 15  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 108  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln  
 1 5 10 15

<210> 109  
 <211> 16  
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<400> 109  
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 1 5 10 15

<210> 110  
 <211> 17  
 <212> PRT  
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<220>  
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<400> 110  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr

<210> 111  
 <211> 18  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 111  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val

<210> 112  
<211> 19  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 112  
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1 5 10 15  
Thr Val Trp

<210> 113  
<211> 20  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 113  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly  
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<210> 114  
<211> 21  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 114  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile  
20

<210> 115  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 115  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys  
 20

<210> 116  
 <211> 23  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 116  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln  
 20

<210> 117  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
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<400> 117  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln Leu  
 20

<210> 118  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
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<400> 118  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln Leu  
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<210> 119  
 <211> 26

<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 119  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile Lys Gln Leu Gln Ala  
20 25

<210> 120  
<211> 27  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 120  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg  
20 25

<210> 121  
<211> 28  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 121  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile  
20 25

<210> 122  
<211> 29  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 122  
Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu



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25

<210> 123  
 <211> 30  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 123  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala  
 20 25 30

<210> 124  
 <211> 31  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 124  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
 20 25 30

<210> 125  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 125  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
 20 25 30

<210> 126  
 <211> 33  
 <212> PRT  
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<220>  
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Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	0.5	0.5	0	1
Marital Status	0.6	0.5	0	1
Education	12.5	1.5	9	16
Income	15.2	8.5	5	35
Health Status	0.7	0.4	0	1
Stress Level	3.2	1.8	1	5
Life Satisfaction	4.1	1.2	2	6
Work-Life Balance	3.8	1.5	2	5
Family Support	4.5	1.0	3	5
Community Involvement	2.9	1.3	1	4
Personal Growth	3.5	1.4	2	5
Financial Stability	3.0	1.1	2	4
Emotional Well-being	4.0	1.3	3	5
Physical Health	3.7	1.2	2	5
Social Connections	3.3	1.1	2	4
Work Engagement	3.6	1.4	2	5
Life Goals Achievement	3.1	1.0	2	4
Overall Quality of Life	3.9	1.2	2	5

<210> 127

<212> PRT

<220>

<400> 127

<210> 128

<211> 35

<212> PRT

$\langle 220 \rangle$

<400> 128

<210> 129

$\langle 211 \rangle$  36

<212> PRT

$\langle 220 \rangle$

<400> 129

- 34 -

Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
 20 25 30  
 Arg Tyr Leu Lys  
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<210> 130  
 <211> 37  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 130  
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 1 5 10 15  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
 20 25 30  
 Arg Tyr Leu Lys Asp  
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<210> 131  
 <211> 4  
 <212> PRT  
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<220>  
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<400> 131  
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<210> 132  
 <211> 4  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 132  
 Leu Lys Asp Gln  
 1

<210> 133  
 <211> 6  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 133

Arg Tyr Leu Lys Asp Gln  
1 5

<210> 134

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 134

Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 135

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 135

Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 136

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 136

Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 137

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 137

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Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 138  
<211> 11  
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<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 138  
Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 139  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 139  
Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 140  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 140  
Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 141  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 141  
Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 142  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 142  
Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 143  
<211> 16  
<212> PRT  
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<220>  
<223> Artificial Peptide

<400> 143  
Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 144  
<211> 17  
<212> PRT  
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<220>  
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<400> 144  
Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp  
1 5 10 15  
Gln

<210> 145  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 145  
Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
1 5 10 15  
Asp Gln

<210> 146  
 <211> 19  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 146  
 Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
 1 5 10 15  
 Lys Asp Gln

<210> 147  
 <211> 20  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 147  
 Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
 1 5 10 15  
 Leu Lys Asp Gln  
 20

<210> 148  
 <211> 21  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 148  
 Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
 1 5 10 15  
 Tyr Leu Lys Asp Gln  
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<210> 149  
 <211> 22  
 <212> PRT  
 <213> Artificial Sequence

<220>  
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<400> 149  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
 1 5 10 15  
 Arg Tyr Leu Lys Asp Gln  
 20

<210> 150  
 <211> 23  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 150  
 Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
 1 5 10 15  
 Glu Arg Tyr Leu Lys Asp Gln  
 20

<210> 151  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 151  
 Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala  
 1 5 10 15  
 Val Glu Arg Tyr Leu Lys Asp Gln  
 20

<210> 152  
 <211> 25  
 <212> PRT  
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<220>  
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<400> 152  
 Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
 1 5 10 15  
 Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25

<210> 153  
 <211> 26  
 <212> PRT



<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 153

Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile  
1 5 10 15  
Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 154

<211> 27

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 154

His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg  
1 5 10 15  
Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 155

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 155

Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala  
1 5 10 15  
Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 156

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 156

Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln  
1 5 10 15  
Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 157  
 <211> 30  
 <212> PRT  
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<220>  
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<400> 157  
 Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu  
 1 5 10 15  
 Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25 30

<210> 158  
 <211> 31  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 158  
 Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln  
 1 5 10 15  
 Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25 30

<210> 159  
 <211> 32  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 159  
 Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys  
 1 5 10 15  
 Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25 30

<210> 160  
 <211> 33  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 160

Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile  
1 5 10 15  
Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp  
20 25 30  
Gln

<210> 161

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 161

Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly  
1 5 10 15  
Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
20 25 30  
Asp Gln

<210> 162

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 162

Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp  
1 5 10 15  
Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
20 25 30  
Lys Asp Gln  
35

<210> 163

<211> 36

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 163

Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val  
1 5 10 15  
Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr

20                      25                      30  
 Leu Lys Asp Gln  
 35

<210> 164  
 <211> 37  
 <212> PRT  
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<220>  
 <223> Artificial Peptide

<400> 164  
 Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr  
 1                      5                      10                      15  
 Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
 20                      25                      30  
 Tyr Leu Lys Asp Gln  
 35

<210> 165  
 <211> 38  
 <212> PRT  
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<220>  
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<400> 165  
 Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
 1                      5                      10                      15  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
 20                      25                      30  
 Arg Tyr Leu Lys Asp Gln  
 35

<210> 166  
 <211> 34  
 <212> PRT  
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<220>  
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<400> 166  
 Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly  
 1                      5                      10                      15  
 Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
 20                      25                      30  
 Asp Gln

<210> 167  
<211> 33  
<212> PRT  
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<220>  
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<400> 167  
Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile  
1 5 10 15  
Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp  
20 25 30  
Gln

<210> 168  
<211> 32  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 168  
Ile Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys  
1 5 10 15  
Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25 30

<210> 169  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 169  
Glu Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln  
1 5 10 15  
Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25 30

<210> 170  
<211> 30  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 170  
 Ala Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu  
 1 5 10 15  
 Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25 30

<210> 171  
 <211> 29  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 171  
 Gln Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln  
 1 5 10 15  
 Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25

<210> 172  
 <211> 28  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 172  
 Gln His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala  
 1 5 10 15  
 Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25

<210> 173  
 <211> 27  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 173  
 His Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg  
 1 5 10 15  
 Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
 20 25

<210> 174  
 <211> 26

<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 174  
Leu Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile  
1 5 10 15  
Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 175  
<211> 25  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 175  
Leu Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu  
1 5 10 15  
Ala Val Glu Arg Tyr Leu Lys Asp Gln  
20 25

<210> 176  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 176  
Gln Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala  
1 5 10 15  
Val Glu Arg Tyr Leu Lys Asp Gln  
20

<210> 177  
<211> 23  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 177  
Leu Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val  
1 5 10 15  
Glu Arg Tyr Leu Lys Asp Gln

<210> 178  
 <211> 22  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 178  
 Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
 1 5 10 15  
 Arg Tyr Leu Lys Asp Gln  
 20

<210> 179  
 <211> 21  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 179  
 Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg  
 1 5 10 15  
 Tyr Leu Lys Asp Gln  
 20

<210> 180  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide

<400> 180  
 Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr  
 1 5 10 15  
 Leu Lys Asp Gln  
 20

<210> 181  
 <211> 19  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Artificial Peptide



<400> 181  
Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu  
1 5 10 15  
Lys Asp Gln

<210> 182  
<211> 18  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 182  
Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys  
1 5 10 15  
Asp Gln

<210> 183  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 183  
Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp  
1 5 10 15  
Gln

<210> 184  
<211> 16  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 184  
Gln Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 185  
<211> 15  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 185  
Leu Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10 15

<210> 186  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 186  
Gln Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 187  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 187  
Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 188  
<211> 13  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 188  
Ala Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 189  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 189  
Arg Ile Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 190  
<211> 10  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 190  
Leu Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5 10

<210> 191  
<211> 9  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 191  
Ala Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 192  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 192  
Val Glu Arg Tyr Leu Lys Asp Gln  
1 5

<210> 193  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 193  
Glu Arg Tyr Leu Lys Asp Gln

1 5

<210> 194  
<211> 6  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 194  
Arg Tyr Leu Lys Asp Gln  
1 5

<210> 195  
<211> 5  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 195  
Tyr Leu Lys Asp Gln  
1 5

<210> 196  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 196  
Leu Lys Asp Gln  
1

<210> 197  
<211> 36  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 197  
Tyr Thr Ser Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln  
1 5 10 15  
Glu Lys Asn Glu Gln Glu Leu Glu Leu Asp Lys Trp Ala Ser Leu  
20 25 30

Trp Asn Trp Phe  
35

<210> 198  
<211> 33  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 198  
Leu Ile His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn  
1 5 10 15  
Glu Gln Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp  
20 25 30  
Phe

<210> 199  
<211> 31  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 199  
His Ser Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln  
1 5 10 15  
Glu Leu Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
20 25 30

<210> 200  
<211> 29  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Artificial Peptide

<400> 200  
Leu Ile Glu Glu Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu  
1 5 10 15  
Leu Glu Leu Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe  
20 25

<210> 201  
<211> 24  
<212> PRT  
<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 201

Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp Lys  
1 5 10 15  
Trp Ala Ser Leu Trp Asn Trp Phe  
20

<210> 202

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 202

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp Gln  
35

<210> 203

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Artificial Peptide

<400> 203

Asn Asn Leu Leu Arg Ala Ile Glu Ala Gln Gln His Leu Leu Gln Leu  
1 5 10 15  
Thr Val Trp Gly Ile Lys Gln Leu Gln Ala Arg Ile Leu Ala Val Glu  
20 25 30  
Arg Tyr Leu Lys Asp Gln  
35